

What is claimed is:

1. A system for managing a virtual network, comprising:

a first interface to a remote sensing platform, the remote sensing platform sensing status information of at least one operational device;

5 a second interface to at least one client platform, the at least one client platform operable to present the status information of the at least one operational device; and

a mediation server, communicating with the first interface and the second interface, the mediation server translating the status information of the at least one  
10 operational device from a first format to a second format for presentation via the at least one client platform.

2. The system of claim 1, wherein the at least one operational device comprises a plurality of operational devices.

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3. The system of claim 1, wherein the at least one operational device comprises at least one of a power device, a generator device, a gate access device, a water flow device, an aerial tower light device, a vending machine device, a drop box device, a sewer device, a water treatment device, a flood control device, a  
20 railroad device, a waste management device, an environmental management device, a pipeline device, a wellhead device, a downhole device, a traffic device, a gas line

device, a medical device, a financial information device, an inventory tracking device, an other utility device, and a quality management device.

4. The system of claim 1, wherein the first interface comprises a low-  
5 level representation of the at least one operational device.

5. The system of claim 1, wherein the low-level representation  
comprises a graphical representation of the at least one operational device and  
operating data.

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6. The system of claim 1, wherein the second interface comprises a  
graphical user interface displaying the status information.

7. The system of claim 1, wherein the second interface comprises an  
15 Internet connection.

8. The system of claim 1, wherein the second interface comprises an  
input module for inputting commands via the second interface.

20 9. The system of claim 8, wherein the commands comprise at least one  
of display commands selecting status information to display via the second

interface, and operational commands to communicate to the at least one operational device.

10. The system of claim 1, wherein the remote sensing platform  
5 comprises at least one remote network connected to the at least one operational device.

11. The system of claim 10, wherein the at least one remote network  
comprises a wireless network.

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12. The system of claim 11, wherein the wireless network comprises at  
least one of a Cellemetry interface, a MicroBurst interface, a Mobitex interface, an  
OrbComm interface, a RIM interface, a GSM interface, a GPS interface, a  
Bluetooth interface, a LEO satellite interface, a GEO satellite interface, a CDMA  
15 interface, a TDMA interface, an IEEE 802.11b interface, and a HyperLAN II  
interface.

13. The system of claim 10, wherein the at least one remote network  
comprises a wired network.

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14. The system of claim 13, wherein the wired network comprises at least one of a ModBus interface, a VMEBus interface, a Metrum-Datatape interface, an RS-232 interface and a GPIB interface.

5 15. The system of claim 10, wherein the at least one remote network comprises a plurality of remote networks.

10 16. The system of claim 15, wherein the at least one operational device comprises a plurality of operational devices, and each of the plurality of remote networks senses the status information of at least a corresponding one of the operational devices.

17. The system of claim 16, wherein the operational devices are of the same type.

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18. The system of claim 16, wherein at least two of the operational devices are of a different type.

19. The system of claim 1, wherein the mediation server comprises a  
20 database, the database storing information related to the at least one operational device.

20. The system of claim 19, wherein the information stored in the database comprises an operational history of the at least one operational device.

5 21. The system of claim 20, wherein the database is queryable via at least one of the first interface and the second interface.

22. The system of claim 1, wherein the client comprises at least one of a computer and a wireless remote device.

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23. The system of claim 1, wherein the second interface comprises a Web page.

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24. The system of claim 23, wherein the Web page comprises an account login.

25. The system of claim 1, wherein the translation server generates a notification when alert criteria are satisfied in the status information.

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26. The system of claim 25, wherein the notification comprises at least one of landline telephonic notification, wireless telephonic notification, email

notification, pager notification, instant messaging notification and PDA notification.

27. The system of claim 1, wherein the mediation server comprises a  
5 redundant device for failure recovery.

28. A method for managing a virtual network, comprising:

- a) sensing status information of at least one operational device via a remote sensing platform;
- 10 b) interfacing to at least one client platform, the at least one client platform operable to present the status information of the at least one operational device; and
- c) translating the status information of the at least one operational device from a first format to a second format for presentation via the at least one  
15 client platform.

29. The method of claim 28, wherein the at least one operational device comprises a plurality of operational devices.

20 30. The method of claim 28, wherein the at least one operational device comprises at least one of a power device, a generator device, a gate access device, a

water flow device, an aerial tower light device, a vending machine device, a drop box device, a sewer device, a water treatment device, a flood control device, a railroad device, a waste management device, an environmental management device, a pipeline device, a wellhead device, a downhole device, a traffic device, a gas line device, a medical device, a financial information device, an inventory tracking device, an other utility device, and a quality management device.

31. The method of claim 28, further comprising a step of (d) generating a low-level representation of the at least one operational device.

32. The method of claim 31, wherein the step (d) of generating a low-level representation comprises a step (e) of generating a graphical representation of the at least one operational device and operating data.

33. The method of claim 28, further comprising a step of (f) generating a graphical user interface displaying the status information.

34. The method of claim 28, wherein the step (b) of interfacing comprises a step (g) of establishing an Internet connection.

35. The method of claim 28, wherein the step (b) of interfacing comprises a step (h) of generating an input module for inputting commands.

36. The method of claim 35, wherein the commands comprise at least one of display commands selecting status information to display via the second interface, and operational commands to communicate to the at least one operational device.

37. The method of claim 28, wherein the remote sensing platform comprises at least one remote network connected to the at least one operational device.

38. The method of claim 37, wherein the at least one remote network comprises a wireless network.

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39. The method of claim 38, wherein the wireless network comprises at least one of a Cellemetry interface, a MicroBurst interface, a Mobitex interface, an OrbComm interface, a RIM interface, a GSM interface, a GPS interface, a Bluetooth interface, a LEO satellite interface, a GEO satellite interface, a CDMA interface, a TDMA interface, an IEEE 802.11b interface, and a HyperLAN II interface.



40. The method of claim 37, wherein the at least one remote network comprises a wired network.

5        41. The method of claim 40, wherein the wired network comprises at least one of a ModBus interface, a VMEBus interface, a Metrum-Datatape interface, an RS-232 interface and a GPIB interface.

42. The method of claim 37, wherein the at least one remote network  
10 comprises a plurality of remote networks.

43. The method of claim 42, wherein the at least one operational device comprises a plurality of operational devices, and the step (a) of sensing comprises a step (i) of sensing in each of the plurality of remote networks the status information  
15 of at least a corresponding one of the operational devices.

44. The method of claim 43, wherein the operational devices are of the same type.

20        45. The method of claim 43, wherein at least two of the operational devices are of a different type.

46. The method of claim 28, further comprising a step of (j) storing information related to the at least one operational device in a database.

5 47. The method of claim 46, wherein the step (j) of storing comprises a step (k) of storing comprises an operational history of the at least one operational device in the database.

10 48. The method of claim 47, further comprising a step of (l) querying the database.

49. The method of claim 28, wherein the client platform comprises at least one of a computer and a wireless remote device.

15 50. The method of claim 28, wherein the step (b) of interfacing comprises a step (m) of interfacing to a Web page.

51. The method of claim 50, further comprising a step of (n) performing an account login.

52. The method of claim 28, further comprising a step of (o) generating a notification when alert criteria are satisfied in the status information.

53. The method of claim 52, wherein the step (p) of generating a  
5 notification comprises a step (q) of generating at least one of landline telephonic notification, wireless telephonic notification, email notification, pager notification, instant messaging notification, and PDA notification.

54. The method of claim 28, further comprising a step of (r) providing a  
10 redundant device for failure recovery.